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  - U 9.0.x/ 1.3 List of errors PM16

# 1 GENERAL INSTRUCTION FOR THE OPERATION

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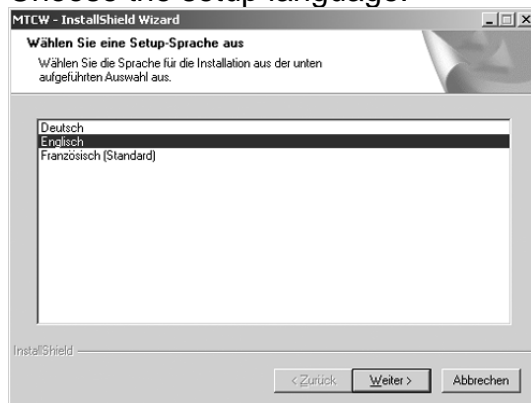
## 1.1 Software installation

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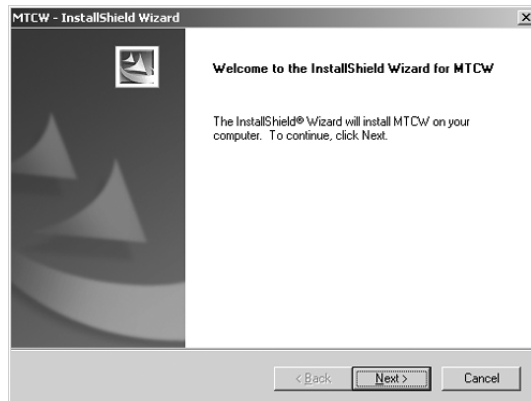
MTCW software is supplied on a disk, respectively already installed in the notebook delivered with MTC.

Installation is done as usual for Windows software. To start the installation : Choose the Setup-File in the MTCW Directory, Execute it with double click. The setup menu will lead you through the installation.

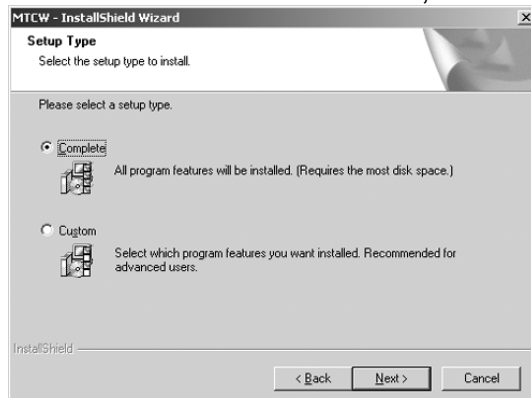
Choose the setup language:



Start the installation:

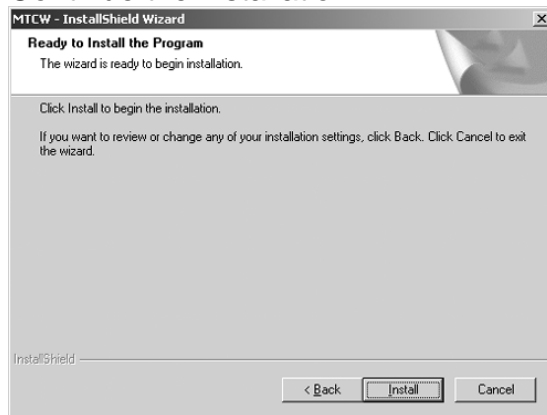


Choose the installation mode, normally complete:

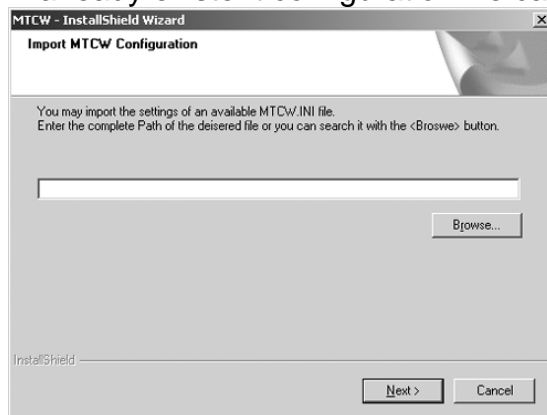




Continue the installation:

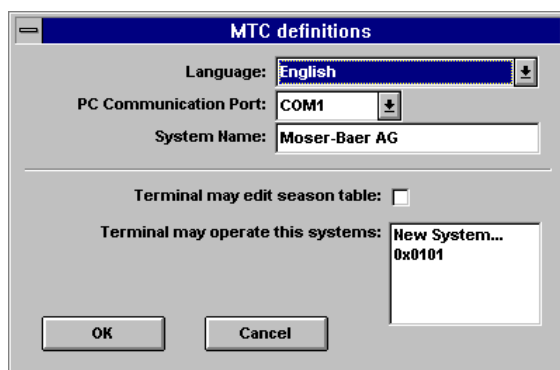


A already existent configuration file can be imported:



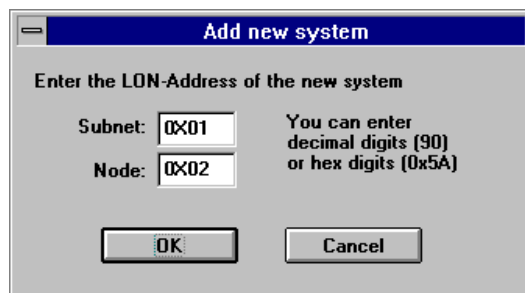
For more details about the installation and configuration see in the document TE-800316.

After the setup you will be asked in a dialogue for system specific information:

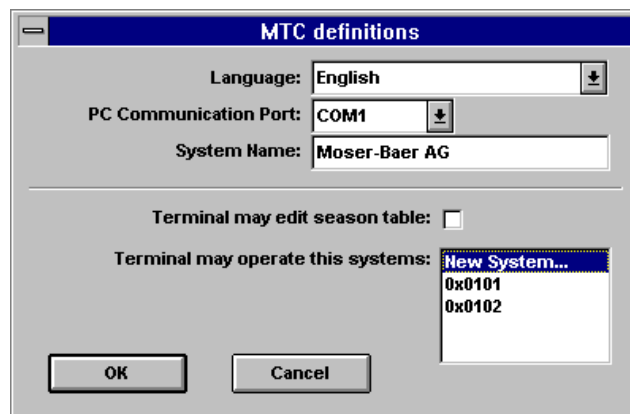


- *Language, PC Communication Port, System Name*  
Language, PC communication port between PC<-> MTC and system name on choice must be defined in this window.

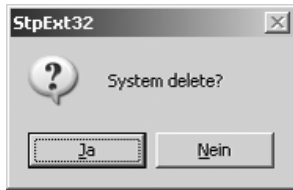
- *Terminal may edit season table*  
 All time calculation in the MTC are based on a season table. Information about used time zones are stored in this table (time bias to UTC, begin and end of daylight time). If the installed season table will be edited from the user, this option must be enabled. The Memory Card Manager can be locked and unlocked the same way.
  
- *Terminal may operate this systems*  
 The LON address of the connected systems which will be served from the PC must be defined here:
  - This address will be 0x0101 if only one system (Rack) exists (no LON-node-card plugged onto the mastercard).
  - If a LON-node is installed on the mastercard, the address on the LON-node must be defined.
  - With double click on *New System* a new system can be added, if there are several systems.



The new address is displayed in the list:



Wrong system addresses can be deleted with a double click on the according address. On the following window this action must be confirmed.



Double click on the MTCW-Icon in Windows to start the MTC operating software or run *Drive:\Folder\MTCW.EXE*.

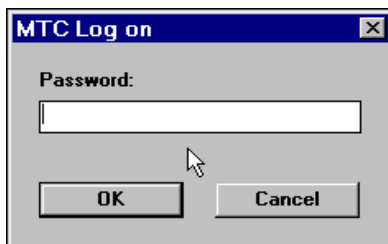
## 1.2 Password protection

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The software *MTCW* is protected by a password after the installation.

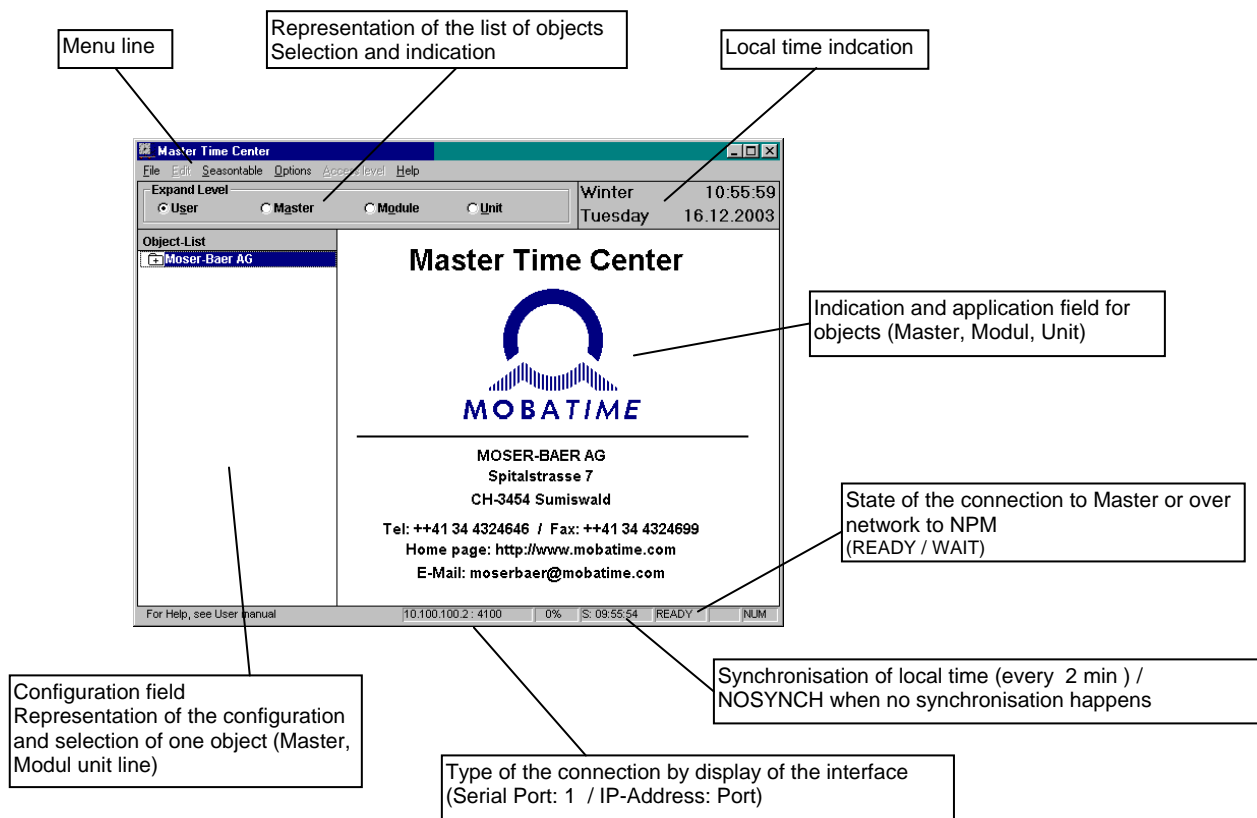
As standard, the password is set to: ***MTCW***

At the startup of the *MTCW* software there is shown a dialog window for the password input.



After the first startup you can change the password under the menu *Options/Change Password...*  
See chapter 'Options'.

1.3 Configuration of the screen



1.4 Menu line

Options *File*, *Seasonable*, *Option* and *Help* are available :

- *File*                    See chapter 'File'.
- *Seasonable*        See chapter 'Seasonable'
- *Options*                See chapter 'Options'
- *Help*                    *About MTCW* is available only (see chapter *Versions*)

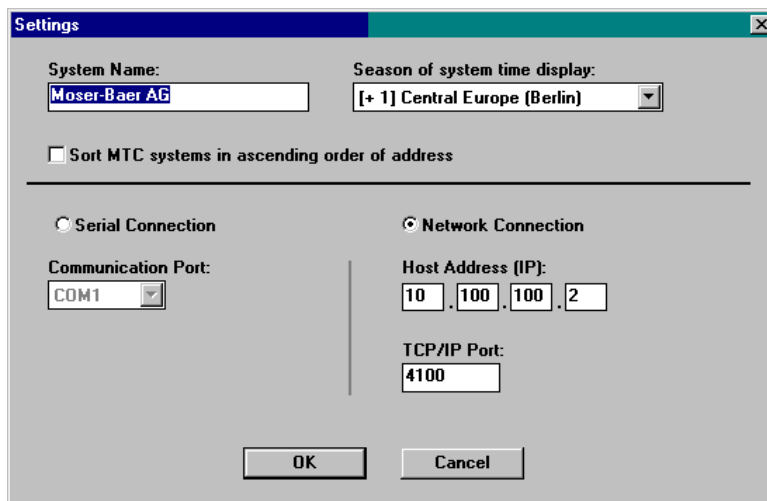
1.4.1 File

The following options are available:

- *Reload Configuration*  
Display refresh.
- *Memory Card Manager ...*  
See chapter 'Memory Card Manager'.
- *Update Control ...*  
See chapter 'Update Control'.
- *Exit*  
Quit program MTCW.

1.4.2 Options

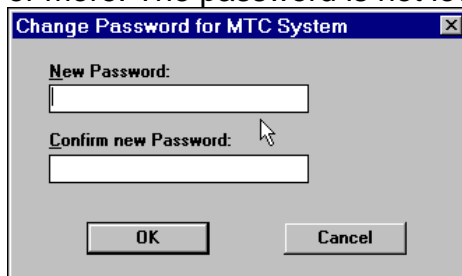
- *Settings...*  
The following window appears. System name, season of system time display and the communication interface for the serial communication or the network communication can be set.



*Host Address (IP) and TCP/IP Port*

Address and Port of a NPM module with activated remote control service.

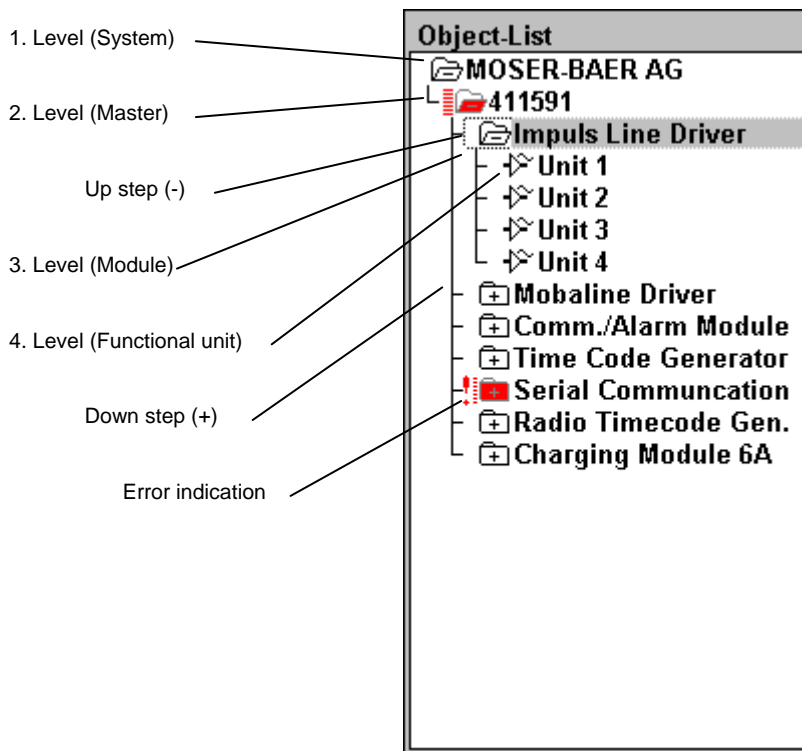
- *Change Password...*  
The following window appears. The length of the password has to be 4 chars or more. The password is not lower case/upper case dependent.



1.5 Expand Level

- *Master* Choice of level System.
- *Module* Choice of level Master.
- *Unit* Choice of level Unit.
- *User* Choice of defined display, resp. by manually change of the display .  
(see also chapter *Presentation of the configuration*).

1.6 Presentation of the configuration



- *Fade in next level (down-step)*  
Double click on the symbol or mark it and press space bar.
- *Fade out level (up-step)*  
Double click on the symbol or mark the symbol and press space bar.
- *Operation on the Master, a module or a functional unit*  
After marking the symbol the corresponding display or operation field will appear on the right hand half of the screen.
- *Display of the present error state*  
Double click on the right hand designation beside the symbol or mark the designation and press space bar.

## 1.7 Value data introduction

---

- Choice of the window :  
With mouse or key *F6*.
- Choice of the mask :  
With mouse, *Tab* (forward) or *Shift* and *Tab* (backward).

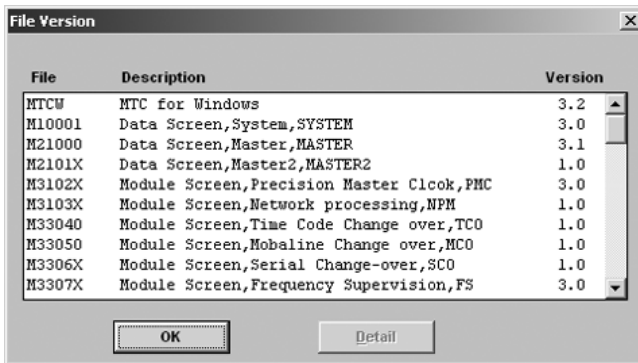
When introducing value datas (particularly limit values of modules) it can occur that the value given back by the system is not exactly the same as the one you entered, due to internal calculation (depends on limited data format within MTC). Little Values are displayed in exponential format. e.g.  $0.05 = 5.e-002$ .

1.8 Versions

Following window will be displayed if *Help / About MTCW* in the menu is selected.

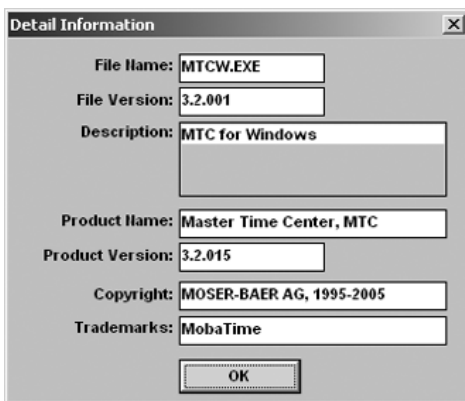


- *Versions Info...* The following window appears:



The window shows the versions of different Files.

- *Detail*  
Displays file information about a selected file (also with double click on file).



- *OK* Closes the active window.



2 SEASONTABLE

---

2.1 Introduction

---

24 different time zones and according summer- /wintertime changes can be defined.

A time zone entry is also named season.

The first entry always defines UTC (GMT) and can't be deleted or edited.

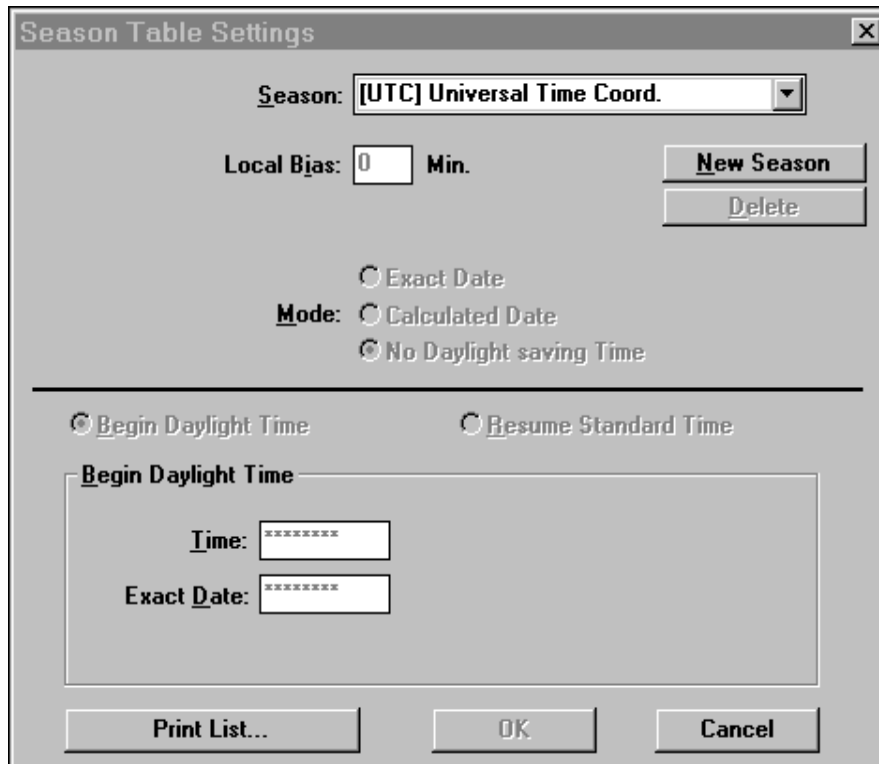
Every time calculation in the MTC system is based on this table.

The table is stored local on the computer and can be transmitted on each MTC system.

2.2 Edit the table

---

Select *Seasontable / Edit* in the menu to edit the table.



First the UTC entry is visible.

- *Season*  
Selection of the Season which will be edited, respectively edit of the season designation.
- *Local Bias*  
Offset UTC<->winter time in minutes.
- *Season Bias*  
Offset winter time <-> summer time in minutes.
- *Mode*  
Selection of one out of the following season types:
  - *Exact time:* Season will be switched only once at this exact date and time.
  - *Calculated Date:* Season will be switched every year at the calculated date and time.
  - *No Daylight saving Time:* Local Bias can be entered only.
- *New Season*  
A new season entry can be created.
- *Delete*  
Selected season will be deleted.
- *Begin Daylight Time / Resume Standard Time*  
Selection of the wished entry mask.
- *Print List*  
The standard printing dialog will be opened and the present configuration can be printed on the desired destination.
- *OK*  
The present configuration will be saved on the local computer and the season table edit will be finished.
- *Cancel*  
The season table edit will be cancelled without saving.

Example for entry 'Calculated Date':

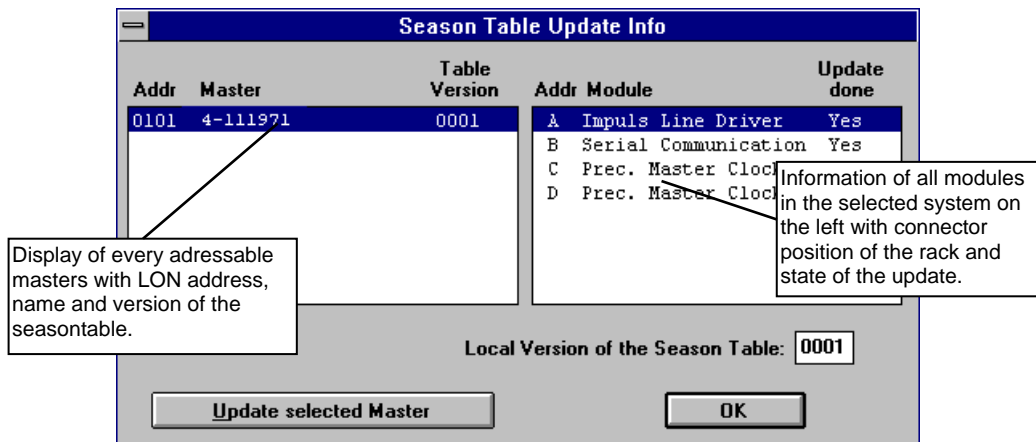
The screenshot shows the 'Season Table Settings' dialog box. The 'Season' dropdown is set to '+ 1] Central Europe (Berlin)'. The 'Local Bias' is 60 Min. and the 'Season Bias' is 60 Min. The 'Mode' is set to 'Calculated Date'. The 'Begin Daylight Time' section is active, showing a 'Time' of 02:00, a 'Calc. Date' of 'Last Day of Month specified', a 'Day' of 'Sunday', and a 'Month' of 'March'. Buttons for 'Print List...', 'OK', and 'Cancel' are at the bottom.

Example for entry 'No Daylight saving Time':

The screenshot shows the 'Season Table Settings' dialog box. The 'Season' dropdown is set to '+ 8] Hong Kong'. The 'Local Bias' is 480 Min. The 'Mode' is set to 'No Daylight saving Time'. The 'Begin Daylight Time' section is active, but the 'Time' and 'Exact Date' fields are empty (displayed as asterisks). Buttons for 'Print List...', 'OK', and 'Cancel' are at the bottom.

2.3 Save table and refresh system

Select *Seasontable / Update Info* in the menu to save the season table and to refresh the system.



- *Local Version of the Season Table*  
Version of the season table which is stored on the local computer. Version number will be increased on every change.
- *Update selected Master*  
The selected Master will be actualised to the seasontable on the local computer.
- *OK*  
Closes the dialogue box.

### 3 MEMORY CARD MANAGER

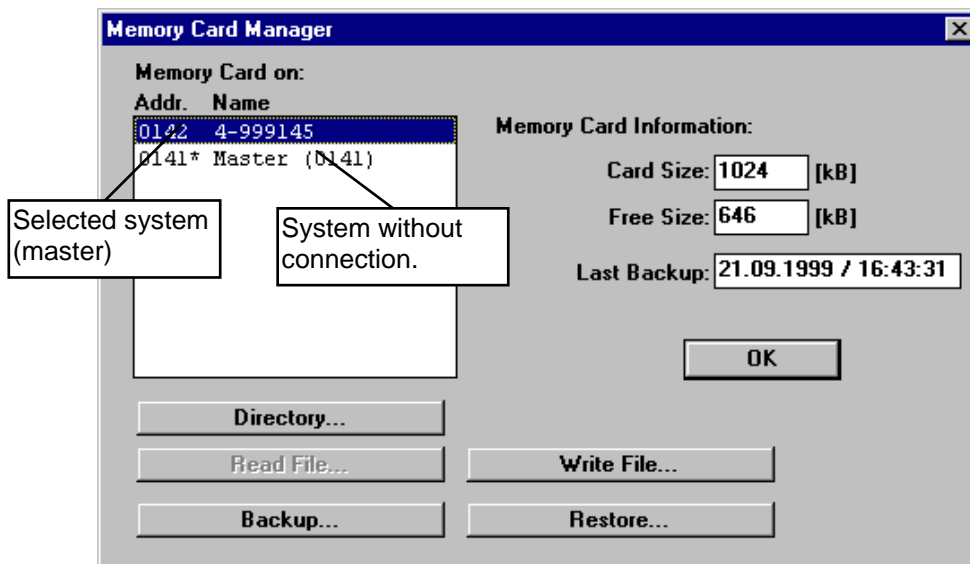
---

Every operation in connection to the memory card is explained in the following chapters.

#### 3.1 Overview

---

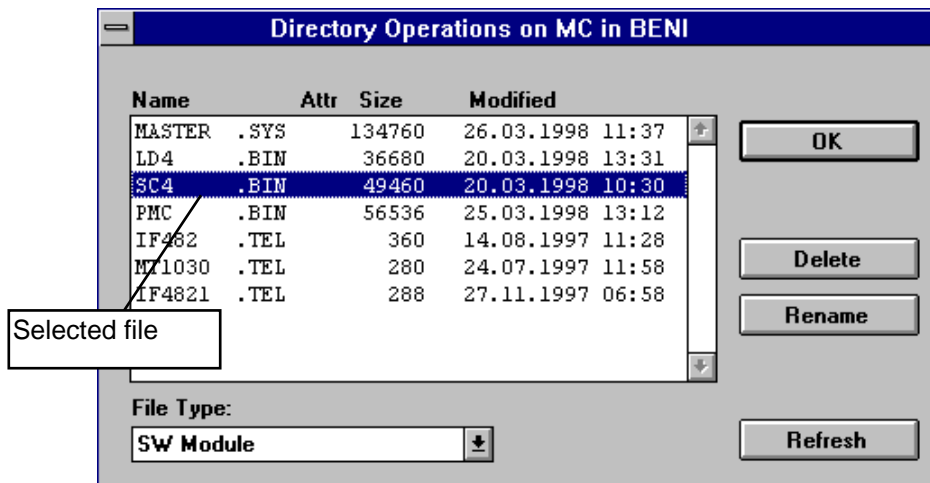
Window 'Memory Card Manager'



- *Memory Card on:*
  - *Addr.* LON address of the system (master).
  - *Name* Name of the system.
- *Memory Card Information:*
  - *Card Size:* Size of the memory card in kilobyte.
  - *Free Size:* Free Size on the memory card in kilobyte.
  - *Last Backup:* Time and date of the last modification on the card.
- *OK*  
Close window 'Memory Card Manager'.
- *Directory...*  
See chapter 'Directory'.
- *Read File...*  
Not available yet.
- *Write File...*  
See chapter 'Write File'.
- *Backup...*  
See chapter 'Backup'.
- *Restore*  
See chapter 'Restore'.

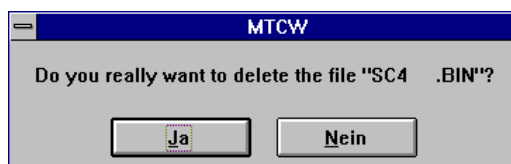
3.2 Directory

Window 'Directory Operation on MC in [system name]'

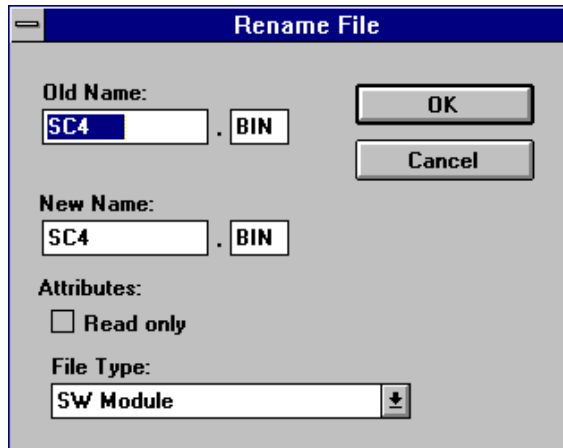


- *Name*  
Filename.
- *Attr*  
Attribute of the file: B=Backup; R=Write protected.
- *Size*  
Filesize in Bytes.
- *Modified*  
Date of last modify.
- *File Type*  
Filetype of the selected file / file filter (unknown = all files).
- *OK*  
Close window.
- *Delete*  
Delete selected file.
- *Rename*  
Rename selected file.
- *Refresh*  
Refresh display

Confirm following message to delete a file:



Following window is displayed to rename a file:



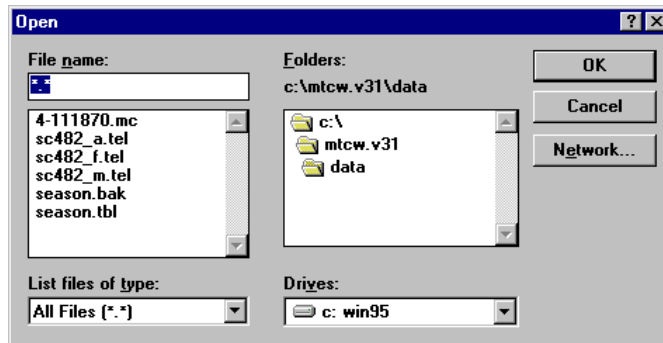
The screenshot shows a 'Rename File' dialog box. It has a title bar with the text 'Rename File'. Inside the dialog, there are two text input fields. The first is labeled 'Old Name:' and contains the text 'SC4'. To its right is a small box containing '.BIN'. The second is labeled 'New Name:' and also contains 'SC4', with another '.BIN' box to its right. To the right of these fields are two buttons: 'OK' and 'Cancel'. Below the name fields is a section labeled 'Attributes:' with a checkbox labeled 'Read only' which is currently unchecked. At the bottom of the dialog is a 'File Type:' dropdown menu that currently displays 'SW Module'.

- *OK*  
Rename file and close window.
- *Cancel*  
Close window without any changes.
- *Old Name*  
Old filename.
- *New Name*  
New filename.
- *Attributes*  
New file will be "Read only" if activated.
- *File Type*  
File type selection of the new file.

### 3.3 Write File

---

Window 'Open':



- *OK*  
Copy selected file.
- *Cancel*  
Close window.
- *Network...*  
Access to network functions.
- *File Name*  
Names of the files in the current folder.
- *File Type*  
Filter for displayed files.
- *Folder*  
Folders on current disk drive. Standard folder: Mtcw\Data.
- *Disk Drive*  
Current disk drive / selection of a new drive.

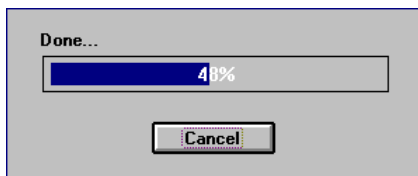


Window 'Write File to MC in [system name]'

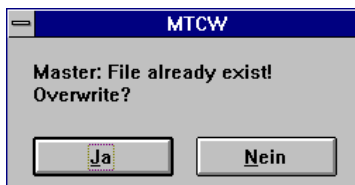


- *OK*  
Write File on mastercard.
- *Cancel*  
Close window without write.
- *Name*  
Name of file which is to write on MC (can be changed here).
- *Filetype*  
Filetype of file which is to write on MC (can be changed here).

Progress of file writing is displayed in the following window.

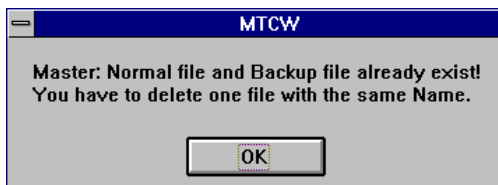


If file already exists, following window will be displayed.



A backup file will be created if Yes is selected.

If backup file already exists, following message is displayed:

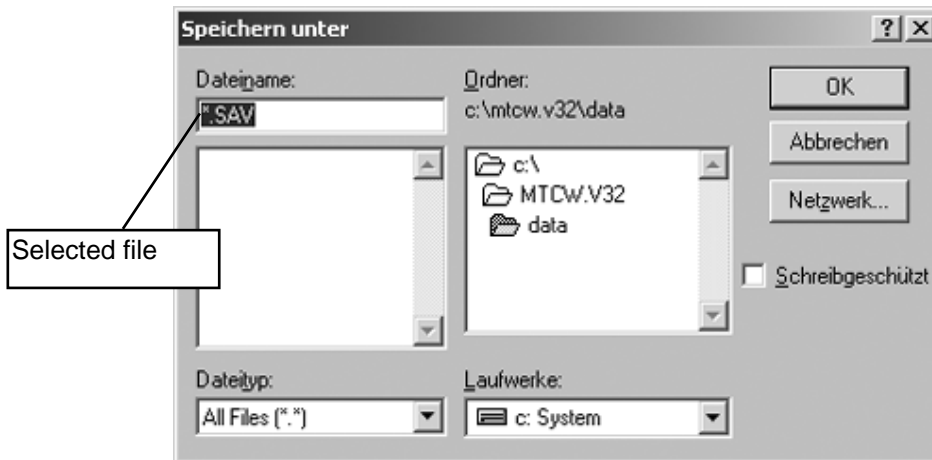


To write the new file on MC, one of the two files must be deleted.

## 3.4 Backup

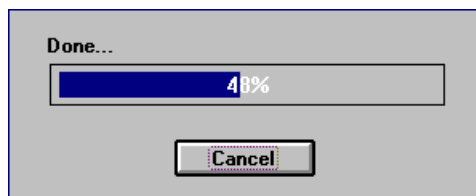
The backup can be executed in a running system. It creates a file with the configuration of the system.

You have to specify the target file in the window 'Save as':



- *OK*  
Starts the backup.
- *Cancel*  
Close window.
- *Network...*  
Access to network functions.
- *File Name*  
Names of the files in the current folder. You can select an existing file or you can type in a file name, normally data.sav.
- *File Type*  
Filter for displayed files.
- *Folder*  
Folders on current disk drive. Standard folder: Mtcw\Data.
- *Disk Drive*  
Current disk drive / selection of a new drive.

Progress of the backup process is displayed in the following window:



You need exclusive access for the system, that means no other user may have access at this time on this system (this is important in the case of a network with LON):



### 3.5 Backup / Restore of the memory card

---

The backup / restore procedure is described in the document TE-800117.

## **4 SOFTWARE UPDATE**

---

The Software Update is described in the document TE-800117.

5 MASTER

5.1 Operation Master

Software Number: 35038.32.00  
LON-Addr: 01.01

---

**Master designation**

**Master time [UTC]**  
 Time:  Date:

**Time Synchronisation**

Off  
 LON  
 Time Code Receiver (DCF)  
 Master Clock Module  
 Manual

Synchronisation only  
 LON-Time Broadcast

**Time State**

Current Source:

Synchronisation:

Last Synchronisation:  
 [UTC]

---

**Time Source Configuration**

Time Offsets (DCF) [min]  
 UTC->Winter:       Winter->Summer:

Timeout for Warnings:  
 DCF:       LON / Module:

---

**Protocol Output**

Baud:       Data bit:   
 Parity:       Stop bit:

---

**I/O-Ports Settings**

Port:  1       Enable  
 2

---

Mode:  Protocol      LON-Addr:    
 Printer      Module-Addr:

Send 'Keep alive' Message

- *Display and utilisation field*  
 Identification according to the master:  
 Software number and version (i.e. V3.200) and LON address.
- *Set Time*  
 The master will overtake the entry from the *Master time (UTC)* field.
- *OK*  
 The present configuration will be transmitted to the master and saved.

- *Undo*  
Changes in the configuration will be cancelled. *Undo* must be pressed before *OK*.
- *Master designation*  
Designation of the master on choice (max. 20 characters).
- *Master Time UTC*  
The time base of the MTC is the **Universal Time Coordinated** (GMT). Here it is possible to enter time and date manually (always UTC). Generally this is not required, as the master time will be set over a connected time source.  
Entry form: time *15:10:37* and date *07.04.95*.  
If *time* and *date* aren't selected, they will show current time (UTC) of the selected system (master).

## 5.2 Time synchronisation

---

### 5.2.1 Time Synchronisation

- *Off*  
No time source (time setting locked).
- *LON*  
Time information from LON bus system.
- *Time Code Receiver (DCF)*  
Time information from external receiver in DCF format.
- *Master Clock Module*  
Time information from Precision Master Clock module (PMC) (MTC internal).
- *Manual*  
Manual entry of the time information.
- *Synchronisation only*  
Synchronize only to the selected source (time setting only if difference is within +/- 5s). No effect, if master is starting up the first time or if time is set manually.
- *LON-Time Broadcast*  
Send the own time to other systems over LON.
- *Manual Time Adjustment ....*  
See chapter 'Manual time adjustment'

### 5.2.2 Time State

- *Current Source*  
Shows the source of the last time synchronisation.
- *Synchronisation*  
Shows the state of the synchronisation:  
*OK:* Master has correct time.  
*Lost:* Master hasn't been synchronised for a long time. This limit can be set under *Time Source Configuration*.
- *Last Synchronisation*  
Shows the last synchronisation moment of the master.

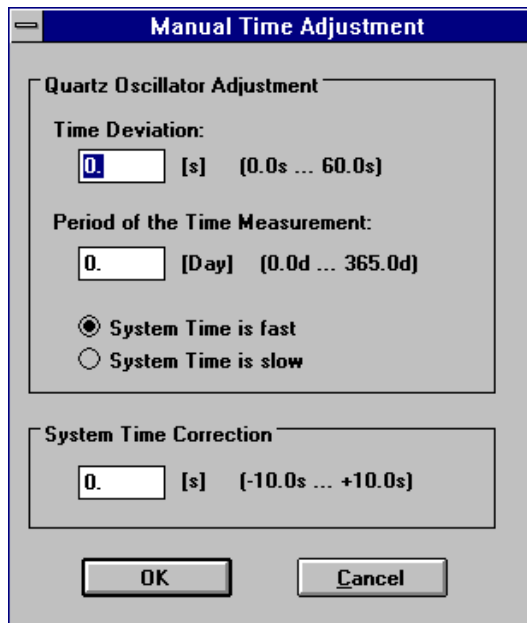
### 5.2.3 Time Source Configuration

- *Time Offsets (DCF) [min]:*  
*'UTC->Winter'* = Offset UTC to winter time in minutes.  
*'Winter -> Summer'* = Offset winter- to summertime in minutes (daylight saving time).
- *Timeout for Warnings:*  
An error is reported if Master isn't synchronised for a longer time than this value.
  - Possibilities in case of DCF reception:  
----, 6h, 12h, 18h, 24h, 30h, 36h, 42h, 48h (--- = no limit)
  - Possibilities in case of time synchronisation from LON or module: ----, 5min, 10min, 15min, 20min, 25min, 30min (--- = no limit).

### 5.3 Manual time adjustment

---

Click on button *Manual Time Adjustment* activates the following window:



This Window is used to adjust the quartz oscillator of the master (software trimming algorithm) if no time source is selected (*Time Synchronisation Manual*) and / or to correct the time exactly on manual time entry:

#### 5.3.1 Quartz Oscillator Adjustment

- *Time Deviation*  
Time Deviation in seconds.
- *Period of the Time Measurement*  
Time period in days which the time deviation is come about.
- *System Time is fast*  
Corresponds to the sign of deviation. System time is faster than comparison time.
- *System Time is slow*  
System time is slower than comparison time.

#### 5.3.2 System Time Correction

Correction time in seconds.

- *OK*  
The present configuration will be transmitted to the master.
- *Cancel*  
Closes the window without any changes.



## 5.4 Protocol output

---

### 5.4.1 Protocol output

Errors and messages of the system can be recorded over this serial interface (COM2).

- *Baud*  
Select of output speed transmission (300 to 19200).
- *Parity*  
*None, Even or Odd* parity.
- *Databit*  
Number of Databits (7, 8).
- *Stopbit*  
Number of Stopbits (1, 2).

### 5.4.2 I/O-Port Settings

Settings for the output of error messages of the system to other devices (printer, network server, ...) over the interface of the master (COM2) or over a corresponding module (i.e. U6.1).

There are 2 ports (port 1, port 2) which can be configured separately. Both ports can be run at the same time (parallel). The addresses are entered in hexadecimal characters.

- *Port*  
Select a port to edit.
- *Enable*  
Select to turn on the port.
- *Mode*
  - *Protocol*: The alarm messages will be reported over this mode.
  - *Printer*: This mode isn't available yet.
- *LON-Addr.*  
System address of the output port.
- *Module-Addr.*  
Module address of the output port.
- *Send 'Keep alive' Message*  
Every 30 seconds a short message will be sent to the port to inform (mainly) the connected computer that the system is still active.  
Message: <STX><ACK><CR><LF>

Example:

Port 1:    LON-Addr            = 01 01 (Addr. of the requested system)  
           Module-Addr        = 00 00 (Addr. of the Master interface COM2)  
       ➔        Messages go over the interface of the master with LON  
                  address 0101.

5.5 Structure of protocol messages

---

The alarm messages of the system are built like this:

```
MTC-1          28.01.1997 13:42:12 A010101U2 E5000-15 A S
Source         Date      Time      Addr.      Alarm      P Z
```

There is a blank space between every field. The message is finished with <CR><LF>.

Source	20 chars	Name of the master or unit (extended unit errors).
Date:	10 chars	Date of the alarm announcement (dd.mm.yyyy).
Time:	8 chars	Time of the alarm announcement (hh:mm:ss).
Addr:	9 chars	LON address, number of module and unit. Unit 0 = Modul
Alarm:	8 chars	Module code and alarm code. E = Module or unit error X = Extended unit error
P:	1 char	Priority of the message.
Z:	1 char	Error state: S=Error in existence    C=Error rested

The alarm code corresponds to the bit number of the error list of the corresponding module.

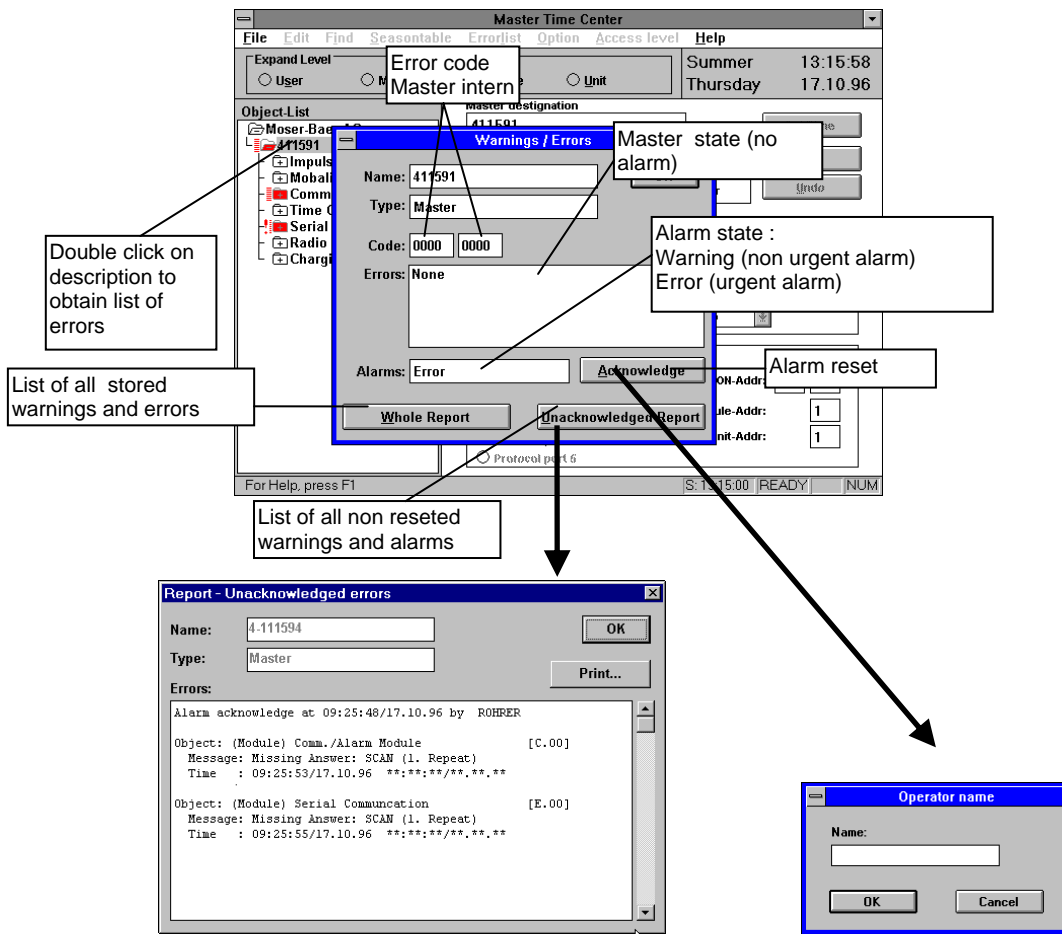
The alarm number 90 is used for the alarm acknowledgement in the system.

Length of the message: 65 chars (including CR / LF).

Protocol statement:

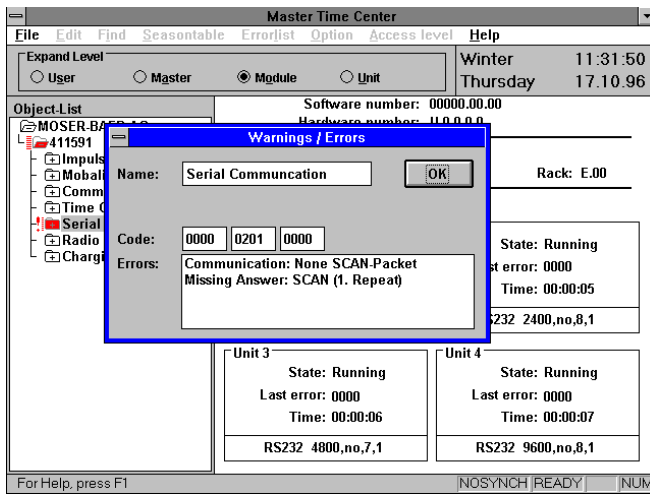
```
MTC-1          28.01.1997 13:42:12 A010101U2 E4000-04 A S
MTC-1          28.01.1997 17:14:00 A010101U2 E4000-04 A C
MTC-2          29.01.1997 13:42:23 A010203U0 E4030-01 W S
MTC-1          29.01.1997 15:42:53 A010100U0 E1000-08 W S
FS-Unit-1     29.01.1997 16:45:53 A010105U1 X3071-07 A S
FS-Unit-1     29.01.1997 16:48:12 A010105U1 X3071-07 A C
MTC-2          29.01.1997 22:15:36 A010203U0 E4030-01 W C
MTC-1          29.01.1997 18:32:27 A010100U0 E1000-90 W C
```

6 ERROR ANNOUNCE AND ALARM



- Every disturbing element is signalled as *Error* (urgent alarm) or as *Warning* (non urgent alarm).
- The signal lamps and contact relays for *Error* and *Warnings* keep being active as long as the announce is not reseted.
- The disturb announces are stored chronologically with time and date of the error code and can be found under *All errors* or *Non reseted errors*.

6.1 Modules errors



The error code for modules is composed of three codes :

- The first one is composed of HIGHBYTE (XB16-XB31) of the enlarged error code of the Master (see under *Enlarged list of errors Master* in chapter *List of errors Masters*).
- The second one is composed of LOWBYTE (XB00-XB15) of this same code.
- The third code corresponds to the error code of the corresponding modules (see *List of errors modules* in chapter *List of errors of each module*)

Decoding of the error code is explained in chapter *Reading of the error code*.

6.2 Status of the module

State: Download	Byte: 27218
Last error: 0000	Rack: E.00

The status of the module can be as follows :

- Normal* Module is running.
- Fatal error* Communication between master and module is interrupted.
- Waiting download* Download of the datas and software from master is awaited. (software from memory card is transferred to the module)
- Initialisation* Initialisation of the module
- Download* Download is running.

### 6.3 Reading of the error codes

---

The errors are represented under hexadecimal form. These errors must be translated into binary code to enable reading. In the list of errors they are represented in bits :

- **Translation from bit to hexadecimal :**

B00=Bit 00 = 0001 hexadecimal  
B01=Bit 01 = 0002 hex.  
B02=Bit 02 = 0004 hex.  
B03=Bit 03 = 0008 hex.  
B04=Bit 04 = 0010 hex.  
B05=Bit 05 = 0020 hex.  
B06=Bit 06 = 0040 hex.  
B07=Bit 07 = 0080 hex.  
B08=Bit 08 = 0100 hex.  
B09=Bit 09 = 0200 hex.  
B10=Bit 10 = 0400 hex.  
B11=Bit 11 = 0800 hex.  
B12=Bit 12 = 1000 hex.  
B13=Bit 13 = 2000 hex.  
B14=Bit 14 = 4000 hex.  
B15=Bit 15 = 8000 hex.

The error code (last error) is composed of the added values of error announces, so the error code (last error) 400C is composed of the following errors :

B02 = 0004 (hex.),  
B03 = 0008 (hex.),  
B14 = 4000 (hex.)

which gives in addition of the following error codes :  
 $0004+0008+4000=\underline{400C}$  (hex.)

- **Translation from decimal to hexadecimal:**

00 = 0 hex.  
01 = 1 hex.  
02 = 2 hex.  
:  
09 = 9 hex.  
10 = A hex.  
11 = B hex.  
12 = C hex.  
13 = D hex.  
14 = E hex.  
15 = F hex.

6.4 List of errors Master

List of errors Master (Master intern):

Prio.	Bit-Nr.	Error	Commentary/measure
E	00	Master has a startup	Master restart
	01	Undefined B1	
	02	Undefined B2	
	03	Undefined B3	
	04	Undefined B4	
	05	Undefined B5	
	06	Undefined B6	
	07	Undefined B7	
	08	Undefined B8	
	09	Undefined B9	
	10	Undefined B10	
	11	Undefined B11	
	12	Undefined B12	
	13	Undefined B13	
	14	Undefined B14	
E	15	Ext. Alarm (from Alarm connector)	Alarm from an external device on Alarm-Input. Check ext. device.
	16	Undefined B16	
W	17	Missing time information from module	Check Master-Clock-Module (PMC) ⇒ Service
W	18	Missing time information from DCF	Check DCF receiver. Check DCF code reception quality.
W	19	Missing time information from LON	Check synchronisation of the LON broadcasting MTC system
W	20	'Synch only' limit exceeded	Timestep above 5ms! Check time source. Set system time manually.
W	21	Master time drift too high (time source)	Check master quartz and time source. ⇒ Service
W	22	Master time drift too high (modules)	Check master quartz and time source. ⇒ Service
	23	Undefined B23	
	24	Undefined B24	
PC	25	Undefined B25	
PC	26	Undefined B26	
PC	27	No connection H8-LON	Exchange LON node ⇒ Service
PC	28	No login possible	Too many terminals logged in the system
PC	29	Undefined B29	
PC	30	No communication on LON	Wrong LON address on LON node. Check LON connection. Check master ⇒ Service
PC	31	Timeout, no control message	Check LON connection. Check master ⇒ Service

Prio: priority

W : warning

E : error

PC: Errors only displayed in MTCW-Software (no relay action!)

Exact manipulation of the error code is explained in chapter *Error announce and alarm / reading of the error code*.

Enlarged list of errors Master (errors that can be recognised from Master to modules)

Prio.	Bit-Nr.	Error	Commentary/measure
E	00	Missing Answer: SCAN (1. Repeat)	⇒ Service
E	01	Missing Answer: Start Download	⇒ Service
E	02	Missing Answer: Hardware Number	⇒ Service
E	03	Detected Hardware Number is wrong	⇒ Service
E	04	Download File not found on Memory Card	⇒ Service
E	05	Error while Download	⇒ wait for automatically repeat ⇒Service
E	06	Error in IntelHex-File on Memory Card	⇒ Service
E	07	Download end not detected	⇒ Service
E	08	None start up of the RAM-Software	⇒ Service
E	09	None / Wrong Answer on File-Request	File is not on Memory Card
E	10	Communication: None SCAN Paket	⇒ Service
E	11	Communication: None DATA Paket	⇒ Service
E	12	Missing Answer: While Time Synchronisation	⇒ Service
	13	Undefined XB13	
	14	Undefined XB14	
	15	Undefined XB15	
W	16	Modul Download started	Module-Software was downloaded in Module
	17	Undefined XB17	
	18	Undefined XB18	
	19	Undefined XB19	
	20	Undefined XB20	
	21	Undefined XB21	
	22	Undefined XB22	
	23	Undefined XB23	
	24	Undefined XB24	
	25	Undefined XB25	
	26	Undefined XB26	
	27	Undefined XB27	
	28	Undefined XB28	
	29	Undefined XB29	
	30	Undefined XB30	
	31	Undefined XB31	

Prio: priority

W : warning

E : error

Exact manipulation of the error code is explained in chapter *Error announce and alarm / reading of the error code.*